

IN THE UNITED STATES DISTRICT  
COURT FOR THE WESTERN DISTRICT  
OF TEXAS WACO DIVISION

CUTTING EDGE VISION, LLC,

*Plaintiff,*

v.

T-MOBILE US, Inc., and T-MOBILE USA, Inc.

*Defendants.*

Case No. 6:24-cv-270-AM-DTG

**JURY TRIAL DEMANDED**

**DEFENDANTS' OPENING CLAIM CONSTRUCTION BRIEF**

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**EXHIBIT 1** – Expert Declaration of Dr. Andrew Wolfe Dated February 27, 2025, including CV (“Wolfe Decl.”).

**EXHIBIT 2** – U.S. Patent No. 10,063,761 (the “761 Patent”).

**EXHIBIT 3** – U.S. Patent No. 11,153,472 (the “472 Patent”).

**EXHIBIT 4** – Portions of the File History of U.S. Patent No. 10,063,761 (“761 Patent F.H.”).

**EXHIBIT 5** – Portions of the File History of U.S. Patent No. 11,153,472 (“472 Patent F.H.”).

**EXHIBIT 6** – Plaintiff’s Response to Defendants’ Opening Claim Construction Brief in *Cutting Edge Vision, LLC v. TCL Technology Group Corporation et al.*, C.A. No. 6:22-cv-00285-ADA, Dkt. 45 (W.D. Tex.) (TMO\_CEV\_CC\_000001–000027) (“Pl.’s Cl. Const. Br. (TCL)”).

**EXHIBIT 7** – Expert Declaration of David W. Hughes in *Cutting Edge Vision, LLC v. TCL Technology Group Corporation et al.*, C.A. No. 6:22-cv-00285-ADA, Dkt. 45-1 (W.D. Tex.) (TMO\_CEV\_CC\_000028–000088) (“Hughes Decl. (TCL)”).

**EXHIBIT 8** – Claim Construction Order in *Cutting Edge Vision, LLC v. TCL Technology Group Corporation et al.*, C.A. No. 6:22-cv-00285-ADA, Dkt. 52 (W.D. Tex.) (“Cl. Const. Order (TCL)”).

**EXHIBIT 9** – Plaintiff’s Response in Opposition to Defendants’ Motion for Judgment on the Pleadings in *Cutting Edge Vision, LLC v. TCL Technology Group Corporation et al.*, C.A. No. 6:22-cv-00285-ADA, Dkt. 65 (W.D. Tex.) (TMO\_CEV\_CC\_000623–000649) (“Pl.’s Opp. (TCL)”).

**EXHIBIT 10** – *Macmillan English Dictionary for Advanced Learners*, Second Edition, Macmillan Education, 2007 (TMO\_CEV\_CC\_000785–000789) (“Macmillan Dictionary”).

Cutting Edge Vision (“CEV”) alleges infringement of two patents: U.S. Patent No. 10,063,761 (the “’761 Patent”) and U.S. Patent No. 11,153,472 (the “’472 Patent”).<sup>1</sup> The asserted claims recite a “camera system” comprising a controller configured to: (1) confine the automatic upload of pictures—over a cellular network—to periods of time “without potential cellular network access fees” (’761 Patent, Claim 1) or “without potentially increased cellular network access fees” (’472 Patent, Claims 1 & 5); and (2) automatically connect to a picture hosting service when certain conditions are met. There are four terms in dispute.

### I. Preamble (all asserted claims)

The preamble is limiting because it provides antecedent basis for the term “the camera system” later in the claims. The Federal Circuit has long held that “the preamble constitutes a limitation when the claim(s) depend on it for antecedent basis.” *C.W. Zumbiel Co. v. Kappos*, 702 F.3d 1371, 1385 (Fed. Cir. 2012). Accordingly, the preamble of each independent claim is limiting.

The preamble of claim 1 of the ’472 Patent recites a “camera system,” and the claim later relies upon that part of the preamble. Specifically, element 1(f)(i) of each claim recites the use of a controller to “receive, via the touch sensitive display, a user selection of an upload option that instructs **the camera system . . .**” to take certain actions. Ex. 3 (’472 Patent) at claim 1 (emphasis added). The term “the camera system” refers back to the “camera system” recited in the preamble. Similarly, claim 5 of the ’472 Patent recites “a camera system” in the preamble. This term likewise provides antecedent basis for “the camera system” in claim element 5(f)(i). *See* Ex. 3 (’472 Patent) at claim 5. When the preamble is the antecedent basis for a term appearing in the body of the

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<sup>1</sup> The asserted claims are claims 1-4 and 16 of the ’761 Patent and claims 1, 2, 5, and 6 of the ’472 Patent.

claim—as it is here—the preamble is limiting. *See In re Fought*, 941 F.3d 1175, 1178 (Fed. Cir. 2019).

The same is true of the '761 Patent if the term “the device” refers back to “the camera system.” Ex. 2 ('761 Patent) at Cl. 1. This Court previously construed the term “the device,” in claim 1 of the '761 Patent, as referring back to the “the camera system.” *See* Ex. 8 (Cl. Const. Order (TCL)). Defendants disagree with that construction because the claim terms that recite “the device” are indefinite as discussed below. *See infra* Sec. IV. If the Court disagrees, however, and concludes that “the device” refers back to “the camera system,” then the preambles in each claim of the '761 Patent are limiting.

## II. “cellular network access fees” / “increased cellular network access fees” (all asserted claims)

Defendants’ Proposed Construction	Plaintiffs’ Proposed Construction
Ordinary and customary meaning, <i>i.e.</i> , “cellular network access fees” is different from “increased cellular network access fees,” and “increased” requires a fee beyond the cellular network access fee	Plain and ordinary meaning, no construction necessary.

CEV incorrectly argues that two different terms—“cellular network access fees” and “increased cellular network access fees”—have the same meaning. The Federal Circuit has repeatedly held that “[d]ifferent claim terms are presumed to have different meanings.” *SimpleAir, Inc. v. Sony Ericsson Mobile Commc’ns AB*, 820 F.3d 419, 431 (Fed. Cir. 2016) (quoting *Bd. of Regents of the Univ. of Tex. Sys. v. BENQ Am. Corp.*, 533 F.3d 1362, 1371 (Fed. Cir. 2008)).

The specification confirms that “cellular network access fee” and “increased cellular network access fee” have different meanings. The specification explains that “cellular service providers typically charge a fee for internet access or emailing.” '472 Patent at 14:37–38; Ex. 5 (Remarks dated June 11, 2021) at 7–9 ('472 Patent F.H.) (applicant agreeing that this passage is

“acknowledging the fees charged by cellular service providers.”). Thus, there is a “cellular network access fee” that providers charge to access a network. The specification further recounts that at certain times of the day or weekends, there may be “periods of cheaper network access.” ’472 Patent at 13:5–7. Thus, the specification confirms that there is a “network access” fee that applies at certain periods (the “cheaper” period) and an “increased” network access fees at other times. *Id.*

Extrinsic evidence confirms that the “increased” fee is larger than the baseline fee. The word “increase” means “to become larger in amount or number.” Ex. 10 (Macmillan Dictionary) at TMO\_CEV\_CC\_000788. CEV evidently contends that “cellular network access fee” and “increased cellular network access fee” have the same meaning, but that construction would render the term “increased” meaningless. The Federal Circuit has instructed the district courts to avoid such constructions. *Merck & Co., Inc. v. Teva Pharm. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) (“A claim construction that gives meaning to all the terms of the claim is preferred . . .”).

### III. “(f) a controller configured to: . . .” limitations (all asserted claims)

The asserted patents recite “a controller configured to”<sup>2</sup> perform a list of specified functions, including *confining* automatic connection and upload to specified periods. Those functions are the allegedly inventive part of each claim, and they are not functions that a generic controller can perform without special programming. Accordingly, the “controller configured to” limitation is a means-plus-function element governed by Section 112(6). Under Section 112(6)—now known as 112(f)—the “controller configured to” element is limited to the structures recited

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<sup>2</sup> The asserted claims of the ’462 Patent recite “a controller . . . configured to . . .” whereas the asserted claims of the ’761 Patent recite “a controller configured to . . .” For ease of reference, all “controller” terms will be referred to herein as “a controller configured to . . .”

in the specification. The specification, however, does not disclose the necessary structure. The claims are therefore indefinite.

### 1. Section 112(6) Governs the Recited Functions

Whether 35 U.S.C. § 112(6) governs a particular claim element is a question of law. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1346 (Fed. Cir. 2015). The Court begins that analysis with a presumption. When the structure that performs the functions is not linked to the phrase “means for,” there is a presumption that § 112(6) does not apply. *Id.* at 1348–49. That presumption is not strong, however, and it is overcome if the claim “recites function without reciting sufficient structure for performing that function.” *Id.* at 1349; *see also Advanced Ground Info. Sys., Inc. v. Life360, Inc.*, 830 F.3d 1341, 1347 (Fed. Cir. 2016); *Diebold Nixdorf, Inc. v. Int'l Trade Comm'n*, 899 F.3d 1291, 1298 (Fed. Cir. 2018).

Here, the presumption is overcome because the generic “controller” recited in the claims is not a structure known to perform the allegedly inventive elements of each claim, including: (1) confining automatic uploads of photos to particular periods when there are not potential cellular network access fees or potentially increased cellular network access fees; and (2) automatically connecting to a picture hosting website under the same conditions. The Supreme Court has long explained that patentees may not own every means of accomplishing a particular outcome. As a result, claims are governed by Section 112(6)—and limited to the particular way of accomplishing a result—when (as here) they “use ‘conveniently functional language at the exact point of novelty.’” *Halliburton Oil Well Cementing Co. v. Walker*, 329 U.S. 1, 8 (1946) (citing *General Elec. Co. v. Wabash Appliance Corp.*, 304 U.S. 364, 371 (1938)). And if a patent recites no structure—in the claims or in the specification—sufficient to perform the allegedly inventive functions, the claims are indefinite.

Here, there should be no dispute that the alleged invention is set forth in subsection (f) of the claims. CEV made that representation to the USPTO and repeatedly distinguished the prior art by arguing that it did not disclose the elements of subsection (f). Specifically, CEV said that the controller determines “the upload is allowed *because the system is within one of the periods without potentially increased cellular network access fees*, as determined using data from the cellular interface’ and that the controller automatically enables upload of designated photos to the picture hosting service *when this condition and the other conditions [in element (f)] are met.*” Ex. 5 (IDS & Remarks dated Oct. 24, 2019) at 7 (’472 Patent F.H.); Ex. 5 (IDS & Remarks dated August 27, 2020) at 3 (’472 Patent F.H.); *see also* Ex. 4 (Amendments to Claims dated Feb. 8, 2018) (’761 Patent F.H.); Ex. 9 (Pl.’s Opp. (TCL)) at TMO\_CEV\_CC\_000636. T-Mobile’s expert, Dr. Wolfe, confirms that a POSITA reviewing the prosecution history would know that the claims were only allowed due to the addition of what the claims refer to as the “confin[ing]” functions in element (f). Wolfe Decl. at ¶¶ 95–100; *see also id.* at ¶¶84–94.

There likewise should be no dispute that the alleged invention is described in functional terms. As CEV repeatedly said during prosecution, section (f) recites “functions.” Wolfe Decl. at ¶¶ 85–94. For example, when discussing the portions of the specification that support the claims, the applicant represented that element (f) recites “upload *functions*” and “other *functions*”:

[T]he specification expressly instructs one skilled in the art to interact via touch technology with menus on the LCD to control camera features and ***functions***. These Camera ***functions*** include automatic upload ***functions***, as the touchscreen control is not described as being separate or excluded from other camera features.

...

Also, in Fig. 3 The LCD touchscreen display 42 is shown as an input to the camera controller 40 that handles “other camera control” 50. In other words, Fig. 3 shows the interconnection between the LCD touchscreen input and “other” ***functions***, such as upload ***functions***.

Ex. 5 (Remarks dated June 11, 2021) at 3–5 ('472 Patent F.H.) (emphasis added). Likewise, when discussing the function of confining automatic connection to particular times, the specification refers to the claimed system as being “**operable** for being instructed *to automatically initiate a connection to the internet . . . whenever the predetermined conditions are met,*” and is “**operable** *so that the automatic connection is made only at certain times of day or weekends, etc., so as to confine picture transmission to periods of low network usage or periods of cheaper network access, etc.*” Wolfe Dec. at ¶¶ 61, 93 (reproducing applicant’s June 11, 2021 Remarks) (emphasis added). Reciting “operable” to perform a specific function is the essence of functional claiming.

To a POSITA, a generic “controller” cannot perform the recited functions. As Dr. Wolfe explains, a POSITA would understand that the term “controller” in the claims is simply a substitute for any generic means for performing the claimed functions. Wolfe Decl. at ¶¶ 82–84, 101–121. The specification itself never describes structure that performs any of the purportedly novel functions. Instead, the specification repeats or re-states the same functional language in the claims without identifying structure known to a POSITA as sufficient to perform the functions. Wolfe Decl. at ¶¶ 103, 110. For example, when the specification refers to “controllers,” it does so in the most generic way. It refers to a “camera controller,” a “device controller,” an “i[P]od controller,” a touchpad “controller,” a game “controller,” and “joystick-like controller.” Wolfe Decl. at ¶¶ 104–108. A POSITA would therefore understand that the use of the term “controller” refers to anything that allows for actions or inputs. Wolfe Decl. ¶¶ 104, 112, 115–116. It is a generic term encompassing anything allowing for control. Wolfe Decl. ¶ 104.

Even if the term “controller” were found to be limited to a microprocessor or other integrated circuit—and the specification does not support that limitation—a microprocessor is not sufficient structure to perform the recited functions. Wolfe Decl. ¶¶ 117–119. The Federal Circuit

has held that a generic computer (with a generic processor) can perform only certain limited functions, so disclosure of a generic computer is only sufficient structure to perform those limited functions. Anything beyond such basic functions—including controlling allegedly inventive functions—requires special processing. *See, e.g., Aristocrat Techs. Austl. PTY Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1332–33 (Fed. Cir. 2008) (holding that disclosure of a “general purpose computer or microprocessor” is not sufficient, and an algorithm was necessary to perform the function of “controlling images on . . . [a] video screen”); *EON Corp. IP Holdings LLC v. AT&T Mobility LLC*, 785 F.3d 616, 621–22 (Fed. Cir. 2015) (holding that a processor cannot perform most functions, even those “simple to implement,” without specialized programming); *Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1364 (Fed. Cir. 2012) (“It is only in the rare circumstances where any general-purpose computer without any special programming can perform the function that an algorithm need not be disclosed.”). Dr Wolfe has shown, and CEV cannot reasonably dispute, that a generic microprocessor cannot confine uploads to particular period and cannot automatically connect to a network if the recited conditions exist, without specialized programming. Wolfe Decl. at ¶¶ 114, 117–119, 125, 130, 134.

Importantly, in prior litigation concerning these asserted claims, neither CEV nor its expert contended that a controller or microprocessor without specialized programming was sufficient to perform the claimed functions. Ex. 6 (Pl.’s Cl. Const. Br. (TCL)) at 3–5 (TMO\_CEV\_CC\_000008–10); Ex. 7 (Hughes Decl. (TCL)) at ¶¶ 32–37. To the contrary, CEV argued that it was enough that the recited “controller” included a “microprocessor,” which a POSITA would recognize as structure or a class of structures. Ex. 7 (Hughes Decl. (TCL)) at ¶¶ 32–45; Ex. 6 (Pl.’s Cl. Const. Br. (TCL)) at 3–6 (TMO\_CEV\_CC\_000008–11). Even if the recited “controller” were necessarily a microprocessor (and as shown above, it is not), that would

not be sufficient to avoid Section 112(6).<sup>3</sup> The Federal Circuit, in *XR Communications, LLC v. ARRIS Solutions, Inc.*, No. 2022-1125, 2023 WL 3529830 (Fed. Cir. May 18, 2023), squarely rejected the argument that a generic integrated circuit (like a microprocessor) is sufficient structure to avoid Section 112(6).<sup>4</sup> The Federal Circuit stated:

[Plaintiff] Vivato’s argument simply fails to meaningfully reckon with this court’s precedent, including *Williamson*’s en banc articulation of the legal standard and *Egenera*. ***Given this precedent, we conclude that the district court properly asked whether a POSITA would understand the disputed term not just as structure, but as sufficient structure “for performing [the claimed] function.***” *Williamson*, 792 F.3d at 1348–49.

Vivato also sees error in the district court’s statement that “[a] so-called ‘known class of ***circuit structures***’ cannot be sufficient under the *Williamson* standard.” Claim Construction Order, 2021 WL 3918136, at \*6. In context, however, this statement is unproblematic. True, “[c]laim terms need not connote a single, specific structure, and may instead describe a class of structures” while still avoiding § 112 ¶ 6. *Dyfan*, 28 F.4th at 1366 (cleaned up). But it’s clear from context that the court wasn’t disputing that point. Instead, it was rejecting Vivato’s position that § 112 ¶ 6 is avoided by reciting something a POSITA would understand as structure—even if a POSITA wouldn’t understand it as sufficient structure for performing the claimed function. As discussed above, that is the position our precedent compels rejecting. We therefore see no error in this statement by the district court.

*XR Commc’ns, LLC v. ARRIS Sols., Inc.*, No. 2022-1125, 2023 WL 3529830, at \*2 (Fed. Cir. May 18, 2023) (emphasis added); *see also Williamson*, 792 F.3d at 1348–49; *Advanced Ground*, 830 F.3d at 1347; *Diebold Nixdorf, Inc. v. Int’l Trade Comm’n*, 899 F.3d 1291, 1298 (Fed. Cir. 2018); *Egenera, Inc. v. Cisco Sys.*, 972 F.3d 1367, 1374 (Fed. Cir. 2020).

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<sup>3</sup> A POSA would not understand a “controller” as discussed in the patent as limited to a “microprocessor” because the patent refers to joysticks, touchpads, and other structures as “controller.” *See supra* p. 6.

<sup>4</sup> This Court, on February 2, 2023, preliminarily accepted the argument that a the “controller” was a microprocessor and recited sufficient structure to avoid Section 112(f). *See* Ex. 8 (Cl. Const. Order (TCL)). The Court did not have the benefit of *XR Communications* when it made that ruling.

Under *XR Communications*, and the cases it cites, generic microprocessors are not sufficient structures to avoid application of § 112(6). *See also GoDaddy.com, LLC v. RPost Comms. Ltd.*, No. CV-14-00126, 2016 WL 212676, at \*55–56 (D. Ariz. Jan. 19, 2016), *aff’d*, No. 2016-2335, 2017 WL 1829147 (Fed. Cir. May 5, 2017); *Rovi Guides, Inc. v. Comcast Corp.*, No. 16-CV-9278, 2017 WL 3447989, at \*22–23 (S.D.N.Y. Aug. 10, 2017) (holding that a “processor for performing” was not sufficient disclosure of structure); *Konami Gaming, Inc. v. Marks Studios, LLC*, 2017 WL 3174905, at \*3–6 (D. Nev. July 25, 2017) (references to “a generic processor” did not identify sufficient structure); *Velocity Patent LLC v. Mercedes-Benz USA, LLC*, No. 13-cv-8413, 2016 WL 5234110, at \*4–7 (N.D. Ill. Sept. 21, 2016) (references to a “processor subsystem” did not identify sufficient structure); *Intellectual Ventures I LLC v. Canon Inc.*, No. 13-473-SLR, 2015 WL 1458035, at \*13 (D. Del. Mar. 27, 2015) (finding insufficient structure disclosed by “a processing device configured to” perform a list of enumerated functions).

Indeed, since *XR Communications*, the Federal Circuit has reiterated that terms, such as “[c]ontroller” and “processor” should be construed under § 112(6) as means plus function terms. *WSOU Invs. LLC v. Google LLC*, No. 2022-1063, 2023 WL 6889033, at \*3 (Fed. Cir. Oct. 19, 2023) (affirming district court’s construction of “processor” under 112(6)). Courts had also reached the same conclusion prior to *XR Communications*. *See, e.g., Raven Sun Creative, Inc. v. Walt Disney Parks and Resorts, Inc.*, No. 6:21-CV-1864-ACC-EJK, 2023 WL 12033365, at \*1 (M.D. Fla. Mar. 6, 2023) (“The Court finds ‘controller’ should be construed as means-plus-function claim and found to be indefinite.”).

*WSOU* is especially instructive because there the Federal Circuit found that there is no categorical rule that the term “processor” connotes sufficient structure and found, in the context of the patent at issue that the term “processor” was used so broadly as to generically be any structure

that manipulates data. *WSOU*, 2023 WL 6889033, at \*4. As discussed above, in the context of the asserted patents, the same finding is appropriate here. “Controller configured to . . .” is used so broadly as to refer to any means to perform the recited functions.

Further, the Federal Circuit has determined that similar terms such as “control” and “control circuit” are means-plus-function terms when used, as here, as generic terms for any structure performing the claimed function. *See, e.g., Fiber, LLC v. Ciena Corp.*, 792 Fed. App’x 789, 791 (Fed. Cir. 2019) (“a control operative for” positioning light beams was means-plus-function); *Intelligent Automation Design, LLC v. Zimmer Biomet CMF & Thoracic, LLC*, 799 Fed. App’x 847, 851 (Fed. Cir. 2020) (“control circuit for determining a time” was means-plus-function). Accordingly, the term “controller configured to” is a means-plus-function claim element.

## **2. The Specification Does Not Disclose Structures for Performing the Recited Functions**

Once it is determined that § 112(6) applies, courts must limit the claims to the structures disclosed in the specification, which requires them to search for structure for each claimed function. *Williamson*, 792 F.3d at 1351. When identifying the functions for which structure is needed, the Court relies on the claim language. *Creo Prod., Inc. v. Presstek, Inc.*, 305 F.3d 1337, 1344 (Fed. Cir. 2002) (“The function of a means-plus-function limitation, however, must come from the claim language itself.”); *JW Enters., Inc. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1331 (Fed. Cir. 2005).

Here, the asserted claims identify the functions of the controller as “configured to” confine automatic connection and automatic picture upload to periods “without potential cellular network

access fees” or “without potentially increased cellular network access fees.”<sup>5</sup> Wolfe Decl. ¶¶ 84–89. Subsection (f)(i) of the asserted claims also confirms the controller confines upload to particular periods. Wolfe Decl. ¶¶ 87–88. For example, the asserted claims recite that the device is instructed “*to confine automatic picture upload to periods*” “*without potential cellular network access fees*” or “*without periods of potentially increased cellular network access fees*.”<sup>6</sup>

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<sup>5</sup> The claims have slight variations in language, but each asserted claim confirms that the controller is configured to automatically connect and enable or cause upload when the controller determines that upload is allowed because the system is within a period “without cellular network access fees” or “without potentially increased cellular network access fees.” For example, Claims 1 and 2 of the ’472 Patent recite: “controller . . . configured to . . . (ii) **automatically connect** to a picture hosting service . . . **and enable an upload** . . . **during any period detected by the controller** in which all three of the following conditions are met: (1) **the upload is allowed because the system is within one of the periods without potentially increased cellular network access fees**, as determined using data from the cellular interface, (2) the system is connected to the internet via the cellular interface; and (3) at least one image sensor-captured picture stored in the local memory has been designated through the touch sensitive display as part of the group of pictures to be uploaded to the picture hosting service.” Claims 5 and 6 of the ’472 Patent recites: “controller . . . configured to . . . (ii) **automatically connect** to a picture hosting service . . . **and enable an upload** . . . **during any period detected by the controller in which** all the following conditions are met: (1) the controller has received from the display a selection of the user-selectable input that instructs the camera system to confine automatic picture uploads to periods without potentially increased cellular network access fees; (2) **the controller has confirmed that the camera system is within a period without potentially increased cellular network access fees**, as determined using data from the cellular interface; (3) the system has a connection to the internet via the cellular interface; and (4) at least one image sensor-captured picture stored in the local memory has been designated through the touch sensitive display as part of the group of image sensor-captured pictures to be uploaded to the picture hosting service.” Claims 1–4 and 16 of the ’761 Patent recites “controller configured to . . . (ii) **automatically connect** to a remote picture hosting service **and cause an upload** . . . **after** receiving: (1) data from the cellular interface used by the controller to determine that **the upload is allowed based on the selected upload option**, (2) an indication that the system is connected to the internet via the cellular interface; and (3) an indication from the local memory that a user has elected an option to designate at least one picture from the group of pictures stored in the local memory to be uploaded to the remote picture hosting service.”

<sup>6</sup> There are slight variations in the asserted claims, but each confirms that the controller confines upload to particular periods because an upload option “instructs” the picture upload to “confine” automatic picture upload to periods “without potentially increased cellular network access fees” or “without potential cellular network access fees.” For example, claim 1 of the ’761 Patent recites: “controller configured to: (i) receive, via the touch sensitive display, a user selection of an **upload option that instructs the device to confine automatic picture upload to periods without potential**

Having identified the functions, the Court “must determine what structure, if any, disclosed in the specification corresponds to the claimed function.” *Williamson*, 792 F.3d at 1351. “Corresponding structure must include all structure that actually performs the recited function.” *Applied Med. Res. Corp. v. U.S. Surg. Corp.*, 312 Fed. Appx. 326, 333 (Fed. Cir. 2009). The Federal Circuit has explained that, “[w]hen dealing with a ‘special purpose computer-implemented means-plus-function limitation,’ we require the specification to disclose the algorithm for performing the function.” *Function Media, LLC v. Google, Inc.*, 708 F.3d 1310, 1318 (Fed. Cir. 2013).

Here, there is no algorithm for performing the claimed functions of “*confining*” automatic connection and automatic picture upload to periods “without cellular network access fees” or “without potentially increased cellular network access fees.” Wolfe Decl. at ¶¶ 122-134; see also *id.* at ¶¶ 111, 114, 117, 120. Notably, in prior litigation involving these claims, CEV and its expert did not identify any algorithm that performs the recited functions. Ex. 6 (Pl.’s Cl. Const. Br. (TCL)) at 3-5 (TMO\_CEV\_CC\_0000008-11); Ex. 7 (Hughes Decl. (TCL)) at ¶¶ 32-49 (TMO\_CEV\_CC\_000038-46). Instead, CEV argued that the specification describes sufficient structure by referencing a “microprocessor” and a “touch sensitive display, the non-volatile memory, the cellular interface.” *Id.* This structure does not constitute an algorithm of any kind, and this hardware is not sufficient to perform the recited functions. Wolfe Decl. at ¶ 120.

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***cellular network access fees.*** Claims 1 and 2 of the ’472 Patent recite: “controller . . . configured to: (i) receive, via the touch sensitive display, a user selection of *an upload option that instructs the camera system to confine automatic picture upload to periods without potentially increased cellular network access fees.*” Claims 5 and 6 of the ’472 Patent recites: “controller . . . configured to: (i) display on the touch sensitive display a user-selectable input that instructs the camera system *to confine automatic picture upload to periods without potentially increased cellular network access fees.*”

The patent does mention known “touchpad technology” including a touchpad “controller” and “software,” “which is also well understood in the computer art.” Ex. 3 (’472 Patent) at 9:32–39. But a POSITA would know that the recited touchpad technology is not sufficient to perform the functions that CEV identified as the point of novelty for its alleged invention. Wolfe Decl. at ¶ 128.

The specification says nothing about “automatically connecting” other than repeating the claim language itself (or slight variations). It says that the system “automatically connects,” is “automatically connecting,” “automatically sends,” “automatically initiate[s] a connection,” “allow[s] for automatic connection,” and is “operable so that the automatic connection is made.” Wolfe Decl. at ¶ 129; Ex. 3 (’472 Patent) at 13:16–30; *id.* at 16:49–63; *id.* at 12:62–13:3; *id.* at 14:28–41; *id.* at 13:3–16. The specification does not identify any algorithm for “automatically connecting . . .” and a POSITA would know that “automatically connecting . . .” requires programming and is not something a generic processor can do without programming or logic designed to perform that function. Wolfe Decl. at ¶¶ 130–131. Furthermore, the Federal Circuit repeatedly has said that merely repeating functional language from the claims—as the specification does here—is not an algorithm sufficient to supply the needed structure. *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1316–17 (Fed. Cir. 2012) (“This type of purely functional language, which simply restates the function associated with the means-plus-function limitation, is insufficient to provide the required corresponding structure.”); *HTC Corp v. IPCO GmbH & Co.*, 667 F.3d 1270, 1280 (Fed. Cir. 2012) (holding that the specification “ha[s] to do more than parrot the recited function; it ha[s] to describe a means for achieving a particular outcome”).

The specification does say that “wireless interface technology” or “software and hardware” are needed. Ex. 3 (’472 Patent) at 12:7–31; 12:39–41. The patent further identifies that a

“microbrowser” can be used so that the “camera system can now independently upload its pictures to any of the internet-based photo printing services, such as those provided by Walmart.com, Walgreens.com, Kodak,.com, etc.” Ex. 3 (’472 Patent) at 12:48–54. But a recitation of undisclosed technology does not supply the purportedly inventive functionality claimed. Wolfe Decl. at ¶ 131. The same is true of a “microbrowser.” *Id.* at ¶ 131, 111. A browser is software that allows a user to visit a website or other location on a computer or the internet. *Id.* at ¶ 11. It is not an algorithm allowing *for* automatic connection or confining uploads to specific periods. *Id.* at ¶ 111. Nor does it allow automatic connections and upload when certain conditions are met. *Id.* at ¶ 111. Accordingly, those disclosures are not structures that correspond to the recited functions. *Function Media*, 708 F.3d at 131.

The primary disclosure in the specification for the controller is a generic box in Fig. 3, which identifies a “camera controller.” ’472 Patent at Fig. 3; *see Wolfe Decl. at ¶ 112, 132*. A box diagram, like generic “wireless interface technology,” “microbrowser” technology, or “software and hardware” discussed above, provides no structure at all and is certainly not sufficient to perform the recited functions. Wolfe Decl. at ¶ 132; *see also ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 519 (Fed. Cir. 2012) (finding no corresponding structure because “there is no explanation as to what structure or algorithm should be used to generate the purchase orders . . . Figure 3 . . . is just a black box that represents the purchase-order-generation *function* without any mention of a corresponding structure.”). Accordingly, the Court should find that there is no algorithm disclosed for performing the allegedly novel *confining* features claimed.

### **3. The Lack of Disclosed Structures for Performing the Recited Functions Renders the Claims Indefinite.**

When, as here, the specification does not disclose a structure sufficient to perform the recited functions, the claims are indefinite. *See, e.g., Advanced Ground*, 830 F.3d at 1346–50

(affirming final judgment entered at claim construction and holding claims invalid as indefinite because there was no algorithm for performing the claimed “symbol generator” function); *Media Rights Techs. v. Capital One Fin. Corp.*, 800 F.3d 1366, 1371–75 (Fed. Cir. 2015) (affirming judgment on the pleadings because there was no algorithm for “compliance mechanism”); *Twin Peaks Software, Inc. v. IBM Corp.*, 690 Fed. App’x 656, 661–65 (Fed. Cir. 2017) (affirming invalidity judgment entered at claim construction because there was no algorithm for “mechanism for managing said component”); *Huawei Techs. Co. Ltd. v. T-Mobile US, Inc.*, 2017 WL 2691227, \*36–37 (E.D. Tex. June 21, 2017) (granting invalidity judgment at claim construction because there was no algorithm for “selection module” and “key derivation module”); *Synachronoss Techs., Inc. v. Dropbox, Inc.*, 2017 WL 6059302, at \*5–9 (N.D. Cal. Dec. 7, 2017) (granting invalidity judgment at claim construction because there was no algorithm for “user identifier module,” “authentication module,” and “user login authenticator”); *Verint Sys. Inc. v. Red Box Recorders Ltd.*, 166 F. Supp. 3d 364, 379–84 (S.D.N.Y. 2016) (granting invalidity judgment at claim construction because there was no algorithm for “computer application” and “monitoring device”); *Farstone Tech. v. Apple Inc.*, 2015 WL 5898273, at \*3–5 (C.D. Cal. Oct. 8, 2015) (granting invalidity judgment at claim construction because there was no algorithm for “backup/recovery module”).

The claims are indefinite even if a POSITA would know how to create the required algorithm, logic, or other structure. The Federal Circuit repeatedly has explained: “[I]t is well established that proving that a person of ordinary skill could devise some method to perform the function is not the proper inquiry as to definiteness—that inquiry goes to enablement.” *Function Media, L.L.C. v. Google, Inc.*, 708 F.3d 1310, 1319 (Fed. Cir. 2011) (citing *Blackboard v. Desire2Learn*, 574 F.3d 1371, 1385 (Fed. Cir. 2009)). Here, the specification does not disclose an

algorithm or logic sufficient to perform the functions in elements (f)(i) or (f)(ii). Accordingly, the asserted claims are indefinite even if a POSITA could create an algorithm to perform the recited functions.

#### IV. “the device” (Claims 1–4 and 16 of the ’761 Patent)

Defendants’ Proposed Construction	Plaintiffs’ Proposed Construction
Indefinite	“The device” is “the camera system,” and is not indefinite.

Claim 1 of the ’761 Patent is indefinite because “the device” lacks antecedent basis and could refer to different structures—the “camera system” or the “controller” configured to perform the recited functions. The claim fails to “inform those skilled in the art about the scope of the invention with reasonable certainty,” and is, therefore, indefinite under § 112, ¶ 2. *Nautilus Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014).

The term “the device” could refer to the “camera system” in the preamble, as CEV previously argued and the Court accepted.<sup>7</sup> But a POSITA would understand that the claim can also be read as having “the device” refer to the “controller” configured to perform the listed functions. In the ’761 Patent, “the device” is programmed “to confine automatic picture upload” to certain periods. Ex. 2 (’761 Patent) at Cl. 1(f)(i). Yet the claims identify the “controller” as the structure that confines automatic picture uploads to particular periods. *Id.* at Cl. 1(f) (“controller configured to . . . receive . . . a user selection . . . that instructs the device to confine automatic picture uploads to periods without potential cellular network access fees”). The controller is the

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<sup>7</sup> Ex. 6 (Pl.’s Cl. Const. Br. (TCL)) at 7–10 (TMO\_CEV\_CC\_000012–15); Ex. 7 (Hughes Decl. (TCL)) at 23–28 (TMO\_CEV\_CC\_000052–57); Ex. 8 (Cl. Const. Order (TCL)) (“The Court issues this Order to memorialize the Court’s final claim construction rulings for the parties, and to inform the parties that the Court plans to issue a more-detailed Order explaining its analysis in due course.”).

only recited structure for performing the function of “confin[ing]” uploads. If “the device” refers to “the camera system,” rather than the controller, then the claims would allow some other, undisclosed component to perform the confining function. Because the controller is the only recited component for performing operations, a POSITA would understand that the “device” could refer to the “controller.” But as the Court previously recognized, “the device” also could refer to the “camera system.”

Each of those alternative constructions gives the claims a different scope. If “the device” refers to the controller, then the controller must confine the upload. If “the device” refers to the “camera system,” then another component in the device could perform the “confin[ing]” function. Under governing authority, these alternative scopes for the claims render them indefinite. *See, e.g., Bushnell Hawthorne, LLC v. Cisco Sys., Inc.*, No. 2019-2191, 813 F. App’x 522, 525 (Fed. Cir. May 14, 2020) (“With three different IP addresses to choose from, a POSITA faced with the ‘said different IP Address’ limitation is left to wonder which of the different IP addresses is ‘said’ different one.”).

CEV previously argued that “the recited operation for ‘the device’ is to “confine automatic picture uploads to periods without potential cellular network access fees” and the specification links that function to the “camera system.” Ex. 6 (Pl.’s Cl. Const. Br. (TCL)) at 8 (TMO\_CEV\_CC\_000013) (citing ’761 Patent at 12:64–13:1). But CEV’s argument conflicts with the claim language which recites that it is “the controller” that “determine[s]” that the upload is allowed based on the selected upload option.” Ex. 2 (’761 Patent) at Claim 1(f).

CEV also argued that the specification uses the words “instruct” and “instructed” in connection with the “camera system.” Ex. 6 (Pl.’s Cl. Const. Br. (TCL)) at 8 (TMO\_CEV\_CC\_000013). But the claim language identifies the controller as the component that

receives the instruction and then instructs the device. *See, e.g.*, Ex. 2 ('761 Patent) at Cl. 1(f)(i) ("[A] controller configured to (i) *receive*, via the touch sensitive display, a user selection of an upload option that *instructs* the device to confine automatic picture upload to periods without cellular network access fees[.]"). Other claim language—for example in unasserted claims—confirms this reading by identifying the controller as having a "control program having instructions." '761 Patent at claim 11.

CEV further argued that it referred to the "camera system" as "the device" during prosecution. Ex. 6 (Pl.'s Cl. Const. Br. (TCL)) at 9 (TMO\_CEV\_CC\_000012–15). But CEV's own expert agrees that a POSITA would understand that the controller is also a device. Ex. 7 (Hughes Decl. (TCL)) at ¶¶ 36, 38, 45 (TMO\_CEV\_CC\_000052–57). The file history, like the claim language, is at best ambiguous.

Because the claims of the '761 Patent fail to "inform those skilled in the art about the scope of the invention with reasonable certainty," they are indefinite. *CardWare Inc. v. Samsung Elecs. Co.*, No. 2:22-CV-141-JRG-RSP, 2023 WL 5434763, at \*21 (E.D. Tex. Aug. 23, 2023) (finding claim lacking antecedent basis indefinite); *see also In re Packard*, 751 F.3d 1307, 1310, 1314 (Fed. Cir. 2014) (affirming finding of indefiniteness based on limitations that "lacked an antecedent basis"). CEV asks the Court to rewrite the claims by substituting the term "the camera system" in place of "the device." The Federal Circuit "has repeatedly held that courts may not redraft claims to cure a drafting error made by the patentee, whether to make them operable or to sustain their validity." *See Lucent Technologies, Inc. v. Gateway, Inc.*, 525 F.3d 1200, 1215 (Fed. Cir. 2008) (collecting cases). "To do so 'would unduly interfere with the function of claims in putting competitors on notice of the scope of the claimed invention.'" *Id.* (quoting *Hoganas AB v. Dresser Industries, Inc.*, 9 F.3d 948, 951 (Fed. Cir. 1993)). Accordingly, T-Mobile respectfully asks the

Court to decline CEV’s invitation to rewrite the claims and instead to rule that the ambiguity within the claims—in which “the device” could refer to one of two separate structures and thereby change the claim scope—renders them indefinite. *See, e.g., Image Processing Techs., LLC v. Samsung Elecs. Co., Ltd.*, 2:16-CV-505, 2017 WL 2672616, at \*15–16 (E.D. Tex. June 21, 2017) (finding a claim indefinite where plaintiff’s request to insert the phrase “to be included” in the claim would “substantively change[] the meaning of the claim”); *Acceleration Bay LLC v. Activision Blizzard, Inc.*, CV 16-453-RGA, 2018 WL 456035, at \*8 (D. Del. Jan. 17, 2018) (finding a claim indefinite, explaining the court “cannot rewrite the patent”).

## V. Conclusion

T-Mobile respectfully asks the Court to adopt its proposed constructions for the terms addressed above.

Dated: February 27, 2025

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**CERTIFICATE OF SERVICE**

A true and correct copy of the foregoing instrument was served or delivered electronically via U.S. District Court [LIVE]- Document Filing System, to all counsel of record, on this the 27th day of February 2025.

By: */s/ Theodore J. Angelis*

Theodore J. Angelis